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British Standard Automobile Series : Specification for
Replacement motor cycle and moped exhaust systems

Série automobile. Systèmes d'échappement de rechange pour motocycles et cyclomoteurs —
 Spécifications

Kraftfahrzeugserie. Ersatzauspuffsysteme für Motorräder und Mopeds

Contents

	Page		Page
Foreword	1	Tables	
Committees responsible	Back page	1. Maximum noise levels for motor cycles or mopeds tested in accordance with C.4.2.2	2
Specification		2. Maximum noise levels for motor cycles or mopeds tested in accordance with C.4.2.3	2
1. Scope	2	3. Distances to be completed during conditioning	4
2. Definitions	2	4. Number of test bench cycles to be completed by each class of motor cycle or moped	4
3. General	2	5. One test bench cycle	4
4. Fibrous material	2	Figure	
5. Permissible noise levels	2	1. Arrangement of test for measuring motor cycle noise level (vehicle in motion)	7
6. Marking and packaging	3		
Appendices			
A. Tests for durability of fibrous material	4		
B. Conditioning of exhaust systems containing fibrous material	4		
C. Methods of measuring noise levels	4		

Foreword

This British Standard has been prepared under the direction of the Automobile Standards Committee, at the request of the Department of Transport and specifies requirements for the silencing properties of replacement motor cycle and moped exhaust systems.

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1. Scope

This British Standard specifies requirements for the silencing properties of replacement exhaust systems or parts thereof for installation on motor cycles and mopeds. It describes methods for measuring the noise emitted by motor cycles and mopeds fitted with these systems and specifies requirements for the durability of fibrous noise absorbing materials where these are used to meet the noise limits. It also includes requirements for marking these exhaust systems, their packaging and for the supply of installation literature.

NOTE. The titles of the publications referred to in this standard are listed on the inside back page.

2. Definitions

For the purposes of this British Standard the following definitions apply.

2.1 motor cycle of type A. A mechanically propelled vehicle, not being an invalid carriage, with less than four wheels and an unladen mass that does not exceed 400 kg, first used between 1 April 1970 and 31 March 1983.

2.2 motor cycle of type B. A two-wheeled vehicle, with or without sidecar, fitted with an engine intended for use on the road and having a maximum design speed of more than 50 km/h, first used on or after 1 April 1983.

2.3 moped of type A. A two or three-wheeled vehicle first used between 1 April 1970 and 31 March 1983 that has a maximum design speed not exceeding 50 km/h, a kerb-side mass not exceeding 250 kg and, if propelled by an internal combustion engine, an engine capacity not exceeding 50 cm³.

2.4 moped of type B. A two or three-wheeled vehicle first used on or after 1 April 1983 that has a maximum design speed not exceeding 50 km/h, a kerb-side mass not exceeding 250 kg and, if propelled by an internal combustion engine, an engine capacity not exceeding 50 cm³.

2.5 exhaust system. A complete set of components through which the exhaust gases escape from the engine unit, including those that are necessary to limit the noise caused by the escape of these gases.

2.6 fibrous materials. Materials of a fibrous nature that are placed within the exhaust system to limit the noise caused by the escape of the exhaust gases.

2.7 maximum rated power speed (S). The engine speed at which the motor cycle or moped develops maximum power.

3. General

Exhaust systems shall be made tamper resistant so far as may be compatible with clearly defined maintenance and installation requirements.

4. Fibrous material

4.1 Fibrous material shall not be used in the manufacture of exhaust systems unless it complies with 4.2 or 4.3. In addition suitable means shall be provided to keep the fibrous material in place.

4.2 The exhaust gases shall not be directed through the fibrous material. The fibrous material shall have a durability commensurate with the exhaust system and shall comply with appendix A.

4.3 Exhaust systems containing fibrous absorbent material shall be prepared for testing in accordance with appendix B, or by removing the fibrous material from the exhaust system.

5. Permissible noise levels

5.1 The maximum noise levels for motor cycles or mopeds tested in accordance with C.4.2.2 shall not exceed the appropriate value given in table 1.

Table 1. Maximum noise levels for motor cycles or mopeds tested in accordance with C.4.2.2

Engine capacity	Maximum noise level
cm ³	dB(A)
Mopeds	77
Motor cycles not exceeding 50	77
Motor cycles greater than 50 but not more than 125	82
Greater than 125	86

5.2 The maximum noise levels for motor cycles or mopeds tested in accordance with C.4.2.3 shall not exceed the appropriate value given in table 2.

Table 2. Maximum noise levels for motor cycles or mopeds tested in accordance with C.4.2.3

Engine capacity	Maximum noise level
cm ³	dB(A)
Mopeds	73
Motor cycles not exceeding 80	78
Motor cycles greater than 80 but not more than 125	80
Greater than 125 but not more than 350	83
Greater than 350 but not more than 500	85
Greater than 500	86